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**IN THE UNITED STATES  
PATENT AND TRADEMARK OFFICE**

**PATENT APPLICATION**

**Inventor(s):** Mehryar Mohri

**Docket No.:** 2001-0226A

**Application No.:** 09/910,090

**Filing Date:** 07/20/2001

**Examiner Name:**

**Group Art Unit:**

**Title:** A System And Method Of Epsilon Removal Of Weighted Automata And Transducers

**THE ASSISTANT COMMISSIONER FOR PATENTS  
WASHINGTON, D.C. 20231**

**SIR:**

**INFORMATION DISCLOSURE STATEMENT**

Pursuant to 37 C.F.R. § 1.56, the attention of the Patent and Trademark Office is hereby directed to the references listed on the attached PTO/SB/08A. Unless otherwise indicated herein, one copy of each reference is attached. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the references be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

- ☒ 1. This Information Disclosure Statement is being filed, within three months of the U. S. filing date; or within three months of the date of the entry of the national stage as set forth in 37 C.F.R. § 1.491 in an international application; or before the mailing date of a first Office Action on the merits; or before the mailing of a first Office Action after the filing of a request for continued examination under 37 C. F. R. § 1.114, whichever occurs last. No certification or fee is required, 37 C.F.R. § 1.97(b).
- ☐ 2. This Information Disclosure Statement is being filed more than three months of the U.S. filing date, or more than three months after the date of the entry of the national stage as set forth in 37 C.F.R. § 1.491 in an international application or after the mailing date of the first Office Action on the merits, but before the mailing date of either a Final Action under 37 C.F.R. § 1.113 or a Notice of Allowance under 37 C.F.R. § 1.311, whichever occurs first, 37 C.F.R. § 1.97(c).
- ☐ a. I hereby certify that each item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Information Disclosure Statement, 37 C.F.R. § 1.97 (e)(1), or

☐ b. I hereby certify that no item of information in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application or, to my knowledge after making reasonable inquiry, was known to any individual designated in 37 C.F.R. § 1.56(c) more than three months prior to the filing of this Information Disclosure Statement, 37 C.F.R. § 1.97 (e)(2).

☐ c. Please debit Deposit Account No. 01-2745 in the amount of \$240.00 to cover the fee under 37 C.F.R. § 1.17(p) and to ensure consideration of the disclosed information. A duplicate copy of this paper is attached.

☐ 3. This Information Disclosure Statement is being filed after the mailing date of either a Final Action under 37 C.F.R. § 1.113 or a Notice of Allowance under 37 C.F.R. § 1.311, whichever occurs first, but before payment of the Issue Fee, 37 C.F.R. § 1.97(d).

☐ a. I hereby certify that each item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Information Disclosure Statement, 37 C.F.R. § 1.97(e)(1).

☐ b. I hereby certify that no item of information in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application or, to my knowledge after making reasonable inquiry, was known to any individual designated in 37 C.F.R. § 1.56(c) more than three months prior to the filing of this Information Disclosure Statement, 37 C.F.R. § 1.97(e)(2).

☐ c. Applicant(s) hereby petition(s) that the Information Disclosure Statement be considered.

☐ d. Please debit Deposit Account No. 01-2745 in the amount of \$130.00 to cover the fee under 37 C.F.R. § 1.17(i) and ensure consideration of the disclosed information. A duplicate copy of this paper is attached.

Respectfully,

Date: 9/27/01

By: Thomas M. Isaacson

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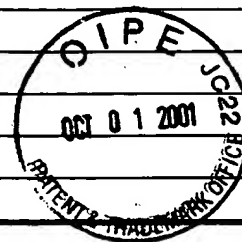
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**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(use as many sheets as (necessary))

Applicati n Number	09/910090
Filing Date	07/20/2001
First Named Inventor	Mehryar Mohri
Group Art Unit	
Examiner Name	
Attorney Docket Number	2001-0226A



Sheet	1	of	2
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**U.S. PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figure Appears
		Number	Kind Code <sup>2</sup> (if known)			
	AA	6,032,111		M. Mohri	02/29/2000	

**FOREIGN PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figure Appears	T*
		Office <sup>3</sup>	Number (if known)	Kind Code <sup>2</sup>				
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\*EXAMINER: Initial if referenced considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup>Unique citation designation number. <sup>2</sup> See attached Kinds of U.S. Patent Documents <sup>3</sup> Enter Office that issued the document, by the two letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

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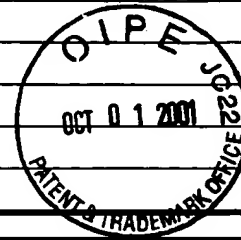
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Application Number	09/910090
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First Named Inventor	Mehryar Mohri
Group Art Unit	
Examiner Name	
Attorney Docket Number	2001-0226A



Sheet 2 of 2

**OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	AB	"Weighted Automata in Text and Speech Processing," by M. Mohri et al, AT&T Corp. 1966, ECAI 96. 12 <sup>th</sup> European Conference on Artificial Intelligence, edited by W. Wahlster, Published in 1996 by John Wiley & Sons, Ltd., 5 pages.	<input type="checkbox"/>
	AC	"The Design Principles of a Weighted Finite-State Transducer Library," by M. Mohri et al, Preprint submitted to Elsevier Preprint, 3 May 1999, 19 pages.	<input type="checkbox"/>
	AD	"Speech Recognition by Composition of Weighted Finite Automata," by F. C. N. Pereira et al., AT&T Labs - Research, Murray Hill, New Jersey, April 20, 1996, 24 pages.	<input type="checkbox"/>
	AE	"State Assignment of Finite-State Machines," by I. Ahmad et al., IEEE Proc.-Comput. Digit. Tech., Vol. 147, No. 1, January 2000, 8 pages.	<input type="checkbox"/>
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<sup>1</sup> Unique citation designation number <sup>2</sup> Applicant is to place a check mark here if English language translation is attached.

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